

SD Program of Study

Engineering & Technology Pathway (Project Lead the Way)

This plan of study should serve as a guide, along with other career planning materials, as you continue your career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. All plans should meet high school graduation requirements as well as college entrance requirements.

	GRADE	English	Math	Science	Social Studies/ Sciences	SD Required Electives	Career & Technical Education Courses	SAMPLE Career Options Relating to This Pathway
Interest Inventory Administered and Plan of Study Initiated for all Students								
SECONDARY	9	* English I	* Algebra I	* Physical Science	* World History * Geography	* PE/Health * Fine Art Elective	Exploring Technology Education	► Aeronautical Engineer ► Aerospace Engineer ► Agricultural Engineer ► Agricultural Technician ► Application Engineer ► Architectural Engineer ► Automotive Engineer ► Biomedical Engineer ► Biotechnology Engineer ► CAD Technician ► Chemical Engineer ► Civil Engineer ► Communications Engineer ► Computer Engineer ► Computer Programmer ► Construction Engineer ► Electrical Engineer ► Electronics Technician ► Geothermal Engineer ► Industrial Engineer ► Manufacturing Engineer ► Manufacturing Technician ► Marine Engineer ► Mechanical Engineer ► Metallurgist ► Mining Engineer ► Nuclear Engineer ► Petroleum Engineer
	10	* English II	* Geometry	* Biology I		2 units total - any combination of: * World Language or	Pre Requisite Courses Introduction to Engineering Design or Principles of Engineering or Digital Electronics	
	Academic/Career Advisement Provided - College Placement Assessments							
	11	* English III	Algebra II	Physics	* American History	* Computer Studies or Approved Career & Technical Education	Specialized Courses Engineering Design and Development or Computer Aided Manufacturing or Aerospace Engineering or Biotechnical Engineering or Civil Engineering * Youth Internship * Senior Capstone	
	12	* English IV	Trigonometry * AP Calculus or <u>College Credit Math</u>	* AP Chemistry	* U.S. Government * Psychology	* Personal Finance or * Economics		
The general course work identified in this Program of Study are those required as part of S.D. Advanced Pathway to Graduation.								
POSTSECONDARY	Year 13	Written and Oral Communications	College Level Math	Natural Sciences	Social Studies/ Sciences	Computer Literacy		► Metallurgist ► Mining Engineer ► Nuclear Engineer ► Petroleum Engineer
	Year1 4	Written Communications	Information Literacy			Wellness for Life Arts & Humanities		
	Year 15							
	Year 16							
◀Blue Text - College Level - Dual Credit						† Red Text - Courses can be articulated to Postsecondary Education		
<u>Underlined Text - Industry Certification Available</u>						* Classes available through Virtual School ♦ Recommended academic		